



November 28, 2006

Kevin J. Martin
Chairman
Federal Communications Commission
445 12th Street, SW
Washington, D.C. 20554

Re: Reply Comments
ET Docket No. 06-135 & RM-11271

Dear Chairman Martin:

Greatbatch, Inc. ("Greatbatch") supports the Alfred Mann Foundation's ("AMF") request that the Commission adopt service rules and allocate up to 20 MHz of spectrum to accommodate new wireless wideband microstimulator devices on a secondary basis. Greatbatch is a major supplier of components for pacemakers, implantable cardioverter defibrillators, neurostimulators, drug pumps and the like. Greatbatch is quite familiar with the work of AMF and its importance in improving the lives of certain types of patients, especially those with various types of paralysis. More bandwidth is required in order to operate and synchronize AMF's miniature implanted electrical stimulators so that these patients will be able to move their limbs, have proper stomach and bowel function and the like. The present MICS frequency band simply does not have sufficient bandwidth for this purpose. With so much of the spectrum currently being used for entertainment purposes, Greatbatch feels that, in comparison, AMF's critically important medical application should have a very high priority.

Others have tried to manipulate limbs through multiple implanted lead wires with distal TIP electrodes and a central processor. A major problem with this hard wired approach is that all of this lead wire is extremely prone to infections, breakage and biocompatibility issues. The AMF wireless solution is the only design approach that makes sense. All the AMF solution needs is sufficient bandwidth.

The establishment of a service allocation is vital to the development of a new generation of wireless wideband medical devices designed to restore sensation and function to paralyzed limbs and organs. These devices offer a safer, less invasive, and more effective treatment option than is available with existing equipment.

The Commission's rules currently do not provide any spectrum to permit operation of new wireless wideband microstimulator devices. Although the Commission has allocated some spectrum for medical telemetry operations and for medical implant communications services, this spectrum is not suitable for wideband medical implant devices that require larger bandwidths to perform more complex functions. Without adequate spectrum and service rules to support the operation of these innovative devices, millions of Americans will be deprived of a safe and effective medical treatment for their debilitating health conditions.

The Commission's notice of inquiry issued in the above-referenced proceeding is an important first step toward adopting the necessary rules to encourage deployment of the next generation of wireless wideband microstimulator devices. Greatbatch urges the Commission to continue its efforts in this area by expeditiously granting AMF's request for commencement of a separate rulemaking.

Sincerely,

A handwritten signature in black ink, appearing to read "Robert A. Stevenson", with a long horizontal flourish extending to the right.

Prof. Robert A. Stevenson, PE
Senior Scientist, Greatbatch Technologies

Member and pending Co-Chairman of the Association for the Advancement of Medical Instrumentation (AAMI) Cardiac Rhythm Device Committee (formerly the pacemaker Committee)

Member ISO Pacemaker – ICD Committee and Member and AAMI Pacemaker EMC Task Force (PC69).

AAMI Technical Expert and Unites States delegate to the International Standards Organization (ISO). Member ISO TC150, SC6, WG2 for development of the new International Standard for Pacemakers. Also member of US TAG ISO/TC/SC6, Active Implants. Member ISO/TC 150/SC6 and IEC/SC 62D - Joint working group on cardiac pacemakers and implantable defibrillators. Member: AAMI Infusion Device Committee and AAMI/NS/WG02, Implantable Neurostimulator working group. Expert Member (representing the United States): ISO/TC 150/SC 6/WG 04, Implantable Infusion Pumps and ISO/TC 150/SC 6/WG05, Implantable Neurostimulators

cc: Marlene H. Dortch
FCC Secretary